CONTENTS OF VOLUME 461

February 1993

Beloozerova I.N. & Sirota M.G. The role of the motor cortex in the control of accuracy of locomotor movements in the cat. 1

Beloozerova I.N. & Sirota M.G. The role of the motor cortex in the control of vigour of locomotor movements in the cat. 27

Lane R. & Adams L. Metabolic acidosis and breathlessness during exercise and hypercapnia in man. 47

Pereira Anthony C., Samellas Dimitri, Tiffert Teresa & Lew Virgilio L. Inhibition of the calcium pump by high cytosolic Ca^{2+} in intact human red blood cells. 63

Hull D., Vinter J. & McIntyre J. The effect of endotoxin-induced fever on thermoregulation in the newborn rabbit. 75

Ramsay S.C., Adams L., Murphy K., Corfield D.R., Grootoonk S., Bailey D.L., Frackowiak R.S.J. & Guz A. Regional cerebral blood flow during volitional expiration in man: a comparison with volitional inspiration. 85

Magnelli Valeria, Sawada Tadao, Delbono Osvaldo, Smith R. Glenn, Appel Stanley H. & Stefani Enrico The action of amyotrophic lateral sclerosis immunoglobulins on mammalian single skeletal muscle Ca^{2+} channels. 103

Dudel J., Parnas I. & Parnas H. Spatial facilitation and depression within one motor nerve terminal of frogs. 119

Parker Ian & Ivorra Isabel Confocal microfluorimetry of Ca^{2+} signals evoked in *Xenopus* oocytes by photoreleased inositol trisphosphate. 133

Hongo Kenichi, Tanaka Etsuko & Kurihara Satoshi Alterations in contractile properties and Ca^{2+} transients by β- and muscarinic receptor stimulation in ferret myocardium. 167

Hongo Kenichi, Tanaka Etsuko & Kurihara Satoshi Mechanism of the effects of acetylcholine on the contractile properties and Ca^{2+} transients in ferret ventricular muscles. 185

Sakai Hideki & Takeguchi Noriaki Small-conductance Cl^- channels in rabbit parietal cells activated by prostaglandin E_2 and inhibited by GTPγS. 201

Lindsay Amy D. & Feldman Jack L. Modulation of respiratory activity of neonatal rat phrenic motoneurones by serotonin. 213

Sharpe Lindsay T., Whittle Paul & Nordby Knut Spatial integration and sensitivity changes in the human rod visual system. 235

Hirsch Judith A. & Gilbert Charles D. Long-term changes in synaptic strength along specific intrinsic pathways in the cat visual cortex. 247

Banach Kathrin, Hüser Jörg, Lipp Peter, Wellner Marie-Cécile & Pott Lutz Activation of muscarinic K^+ current in guinea-pig atrial myocytes by a serum factor. 263

Xu Sengen, Brenner Bernhard & Yu Leepo C. State-dependent radial elasticity of attached cross-bridges in single skinned fibres of rabbit psoas muscle. 283

SCHAEFFEL Frank, WILHELM Helmut & ZRENNER Eberhart Inter-individual variability in the dynamics of natural accommodation in humans: relation to age and refractive errors. 301

OKU Yoshitaka, DICK Thomas E. & CHERNIACK Neil S. Phase-dependent dynamic responses of respiratory motor activities following perturbation of the cycle in the cat. 321

AUERBACH Anthony A statistical analysis of acetylcholine receptor activation in *Xenopus* myocytes: stepwise *versus* concerted models of gating. 339

COURTICE Gillian P., POTTER Erica K. & MCCLOSKEY D. Ian Inhibition of cardiac vagal action by galanin but not neuropeptide Y in the brush-tailed possum *Trichosurus vulpecula*. 379

MAWE Gary M. Noradrenaline as a presynaptic inhibitory neurotransmitter in ganglia of the guinea-pig gall-bladder. 387

BRAMICH Narelle J., BROCK J.A., EDWARDS F.R. & HIRST G.D.S. Responses to sympathetic nerve stimulation of the sinus venosus of the toad. 403

GIUSSANI D.A., SPENCER J.A.D., MOORE P.J., BENNET L. & HANSON M.A. Afferent and efferent components of the cardiovascular reflex responses to acute hypoxia in term fetal sheep. 431

FERRARY Evelyne, BERNARD Christian, OUDAR Olivier, LOISEAU Alain, STERKERS Olivier & AMIEL Claude *N*-Ethylmaleimide-inhibited electrogenic K^+ secretion in the ampulla of the frog semicircular canal. 451

KOSTYUK Platon, PRONCHUK Nina, SAVCHENKO Alexej & VERKHRATSKY Alexej Calcium currents in aged rat dorsal root ganglion neurones. 467

HE Xue D. & GOYAL Raj K. Nitric oxide involvement in the peptide VIP-associated inhibitory junction potential in the guinea-pig ileum. 485

ROSSI Noreen F. Effect of endothelin-3 on vasopressin release *in vitro* and water excretion *in vivo* in Long–Evans rats. 501

MIURA Mitsuhiko, TAKAYAMA Kiyoshige & OKADA Junichi Increase in nitric oxide and cyclic GMP of rat cerebellum by radio frequency burst-type electromagnetic field radiation. 513

TRAUB Roger D., MILES Richard & JEFFERYS John G.R. Synaptic and intrinsic conductances shape picrotoxin-induced synchronized after-discharges in the guinea-pig hippocampal slice. 525

DECETY J., JEANNEROD M., DUROZARD D. & BAVEREL G. Central activation of autonomic effectors during mental simulation of motor actions in man. 549

REGNIER Michael & HERRERA Albert A. Changes in contractile properties by androgen hormones in sexually dimorphic muscles of male frogs (*Xenopus laevis*). 565

DASCALU Avi, NEVO Zvi & KORENSTEIN Rafi The control of intracellular pH in cultured avian chondrocytes. 583

HUANG Yi & RANE Stanley G. Single channel study of a Ca^{2+}-activated K^+ current associated with *ras*-induced cell transformation. 601

FRASER P.A. & DALLAS Annabel D. Permeability of disrupted cerebral microvessels in the frog. 619

AL-BALDAWI Nabil F., MOORE James E. & ABERCROMBIE R.F. Calcium accumulation by organelles within *Myxicola* axoplasm. 633

SCHMID K., KIRKWOOD P.A., MUNSON J.B., SHEN E. & SEARS T.A. Contralateral projections of thoracic respiratory interneurones in the cat. 647

KIRKWOOD P.A., SCHMID K. & SEARS T.A. Functional identities of thoracic respiratory interneurones in the cat. 667

CHINET Auguste Ca^{2+}-dependent heat production by rat skeletal muscle in hypertonic media depends on Na^{+}–Cl^{-} co-transport stimulation. 689

JANKOWSKA E., RIDDELL J.S., SKOOG B. & NOGA B.R. Gating of transmission to motoneurones by stimuli applied in the locus coeruleus and raphe nuclei of the cat. 705

RIDDELL J.S., JANKOWSKA E. & EIDE E. Depolarization of group II muscle afferents by stimuli applied in the locus coeruleus and raphe nuclei of the cat. 723

HANF Remy, LI Yongxin, SZABO Gabor & FISCHMEISTER Rodolphe Agonist-independent effects of muscarinic antagonists on Ca^{2+} and K^{+} currents in frog and rat cardiac cells. 743